## WHAT IS CLAIMED IS:

An inflatable cuff for blood pressure measurement, comprising:

 a first inflatable bag which is inflatable to press an arterial vessel of a
 body portion of a living subject and stop flow of blood in the arterial vessel which the inflatable cuff is adapted to be wound around the body portion;

a second inflatable bag for sensing a pulse wave propagating along the arterial vessel, the second inflatable bag is supported by the inflatable cuff such that the second inflatable bag is located inside a downstream-side portion of the first inflatable bag as seen in the direction in which the blood flows in the arterial vessel, and which has a dimension as measured in said direction that is smaller than a dimension of the first inflatable bag as measured in said direction;

a shielding member disposed between the first inflatable bag and the second inflatable bag so as to prevent an oscillation of the first inflatable bag from propagating to the second inflatable bag; and

a slidable separating member disposed between the shielding member and the second inflatable bag for preventing a slide contact of the shielding member with the second inflatable bag.

- 2. An apparatus according to claim 1, wherein the slidable separating member is made of cloth.
- 3. An apparatus according to claim 2, wherein the slidable separating member is made of fabric of chemical fiber.
- 4. An apparatus according to claim 3, wherein the slidable separating member is made of fabric of nylon.
- 5. An apparatus according to claim 2, wherein the slidable separating member is made of fabric of natural fiber.

- 6. An apparatus according to claim 5, wherein the slidable separating member is made of fabric of hemp.
- 7. An apparatus according to claim 5, wherein the slidable separating member is made of fabric of cotton.
- 8. An apparatus according to claim 1, wherein the slidable separating member is made of unwoven fabric.
- An apparatus according to claim 1, wherein the shielding member is made of hard resin.
- 10. An apparatus according to claim 9, wherein the resin is selected from the group of polyethylene, polypropylene, polyester, polyethylene terephthalate and vinyl chloride.
- 11. An apparatus according to claim 1, wherein the shielding member is a bag filled with incompressible fluid.
- 12. An apparatus according to claim 11, wherein the incompressible fluid is a liquid.
- 13. An apparatus according to claim 11, wherein the incompressible fluid is a gel.